Audit of Forest Planning and Practices on Nisga'a Lands

FPB/ARC/51

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Report from the Board

A. Report from the Board

As part of its 2002 audit program, the Forest Practices Board audited forest planning and practices on Nisga'a lands. This audit is the second of five annual audits of compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code) as well as the forestry-related requirements of the *Nisga'a Final Agreement* (the Agreement). The Agreement requires the Forest Practices Board to perform compliance audits of forest agreements and licences on Nisga'a lands in each year of a defined five-year transition period that ends on May 10, 2005. For more information on the Agreement see www.aaf.gov.bc.ca/treaty/nisgaa/docs/nisga agreement.stm

The audit examined auditees' activities and obligations for the period of July 17, 2001, to August 16, 2002. Five auditees currently have activities or obligations on Nisga'a lands that are subject to audit:

- Skeena Cellulose Inc. (Skeena), which is the operating subsidiary of NWBC Ltd.—TFL 1 and FL A64298
- Sim Gan Forest Corporation (Sim Gan)—FL A64299
- West Fraser Mills Ltd. (West Fraser)—FL A16882
- Kalum Forest District Small Business Forest Enterprise Program (SBFEP)
- Kalum Forest District Manager

The audit examined Skeena's forest planning and practices related to operational planning; timber harvesting; silviculture; fire-preparedness planning; and road construction, maintenance and deactivation. The audit of Sim Gan, West Fraser, and the Kalum SBFEP was limited to silviculture and road maintenance and deactivation obligations, as these auditees did not have active operations during the audit period. The audit examined the activities of the Kalum Forest District Manager related to silviculture, road maintenance and forest health obligations.

The Report from the Auditor (Part C) provides further details on the scope of the audit, and the audit findings. The Report from the Auditor is based on the audit procedures described in Part B of this document.

Before completing this report, the Board considered the Report from the Auditor, along with supporting audit evidence. The Board affirms the auditor's findings and conclusions. The operational planning; timber harvesting; silviculture; fire-preparedness planning; and road construction, maintenance and deactivation activities carried out on Nisga'a lands by Skeena, West Fraser, Sim Gan, and the Kalum SBFEP complied, in all significant respects, with the requirements of the Code and the Agreement as of August 2002. Additionally, road maintenance, silviculture and forest health obligations on Nisga'a lands that are the responsibility of the Kalum Forest District Manager complied, in all significant respects, with the requirements of the Code as of August 2002.

The Board acknowledges the high level of performance of all auditees, noted during the 2002 compliance audit. In particular, the Board commends Skeena and Sim Gan for their efforts to address significant non-compliance findings identified in the Board's 2001 compliance audit on Nisga'a lands. The 2001 Board report on the audit of Skeena's operations on Nisga'a lands included a recommendation, under section 185 of the *Forest Practices Code of British Columbia Act* (the Act), related to riparian management. Skeena has taken appropriate measures to address this recommendation, including amending silviculture prescriptions to eliminate any inaccuracies or unachievable prescriptions. As well, Sim Gan has taken appropriate measures to address non-compliance findings related to road maintenance and bridge inspection activities.

The Board encourages all auditees to continue their efforts towards achieving sound forest management, and looks forward to assessing their forest planning and practices in subsequent Board audits on Nisga'a lands throughout the remainder of the five-year transition period.

In addition to auditing compliance, future Board audits on Nisga'a lands will address emerging issues of concern, such as the increasing incidence of Dothistroma needle blight, as identified in the auditor's report. This potentially devastating foliar disease could have significant forest health and economic impacts, as stands declared to be free growing may incur substantial mortality in the future and require fill-planting. Another key issue that will be monitored by the Board is the status of old (non-status) roads. The province is required to ensure that all roads that require deactivation, under the *Forest Act* or forest practices legislation, are deactivated unless specifically notified otherwise by the Nisga'a Nation. The concern arises in relation to the status of an unspecified but potentially significant number of old roads. In particular, how will the roads be identified, to what standard will the roads need to be deactivated and what is the potential cost to the province and/or licencees of undertaking the deactivation work?

In addition to compliance audits, the Agreement requires the Board to conduct annual audits of the appropriateness of government enforcement on Nisga'a lands during the transition period. To allow for audit efficiencies, the Board chose not to audit government's enforcement on Nisga'a lands in 2002. However, in 2003 the Board will audit a two-year period of government's enforcement.

W.N (Bill) Cafferata, R.P.F.
Chair
January 9, 2003

Forest Practices Board Compliance Audit Process For Nisga'a Lands

B. Forest Practices Board Compliance Audit Process For Nisga'a Lands

Background

The Forest Practices Board conducts audits of government's and agreement holder's compliance with the *Forest Practices Code of British Columbia Act* and regulations (the Code). The Board is given the authority to conduct these periodic independent audits by section 176 of the Act.

The Forest Practices Board is also required by Chapter 5, section 55 of the *Nisga'a Final Agreement* (the Agreement) to perform compliance audits of forest agreements and licences on Nisga'a lands in each year of a defined five-year transition period ending on May 10, 2005. During this period, annual audits must assess compliance with provincial forest practices legislation and the forestry-related requirements of the Agreement.

Audit Standards

Audits by the Forest Practices Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards.

Audits on Nisga'a lands determine compliance with the Code based on criteria derived from the *Forest Practices Code of British Columbia Act* and its related regulations as well as the forestry-related requirements of the Agreement. Audit criteria are established for the evaluation or measurement of each practice required by the Code or Agreement. The criteria reflect judgments about the level of performance that constitutes compliance with each requirement. The standards and procedures for compliance audits are described in the Board's *Compliance Audit Reference Manual*. In addition, specific additional tests were required to audit the requirements of the Agreement (Chapter 5 and appendix H).

Audit Process

Conducting the Audit

The Board determines the staff and resources required to conduct the audit and the period covered by the audit. Board staff also meet with the party being audited to discuss the logistics of the audit before commencing the work.

Aside from notifying those licensees that operate on Nisga'a lands regarding the audit, the Board also notifies the Forestry Transition Committee. The Forestry Transition Committee and the Ministry of Forests, Kalum Forest District, which is part of the Prince Rupert Forest Region, jointly administer forestry activities on Nisga'a lands. The Forestry Transition Committee consists of the Kalum forest district manager and one person authorized by the Nisga'a Nation.

All the activities carried out during the period subject to audit are identified. This includes activities such as the sites harvested or replanted and road sections built or deactivated during the audit period. The items that comprise each forest activity are referred to as a "population." For example, all sites harvested form the "timber harvesting population." All road sections constructed form the "road construction population." The populations are then sub-divided based on factors such as the characteristics of the sites and the potential severity of the consequences of non-compliance on the sites.

The most efficient means of obtaining information to conclude whether there is compliance with the Code is chosen for each population. Because of limited resources, sampling is usually relied upon to obtain audit evidence, rather than inspecting all activities.

Individual sites and forest practices within each population have different characteristics, such as the type of terrain or type of yarding. Each population is divided into distinct sub-populations on the basis of common characteristics (e.g., steep ground vs. flat ground). A separate sample is selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to the sub-population where the risk of non-compliance is greater.

Audit work in the field includes assessments from helicopters and intensive ground procedures such as the measurement of specific features like road width. The audit teams generally spend one to two weeks in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code or the Agreement is more a matter of degree than absolute adherence. Determining compliance requires the exercise of professional judgment within the direction provided by the Board.

Auditors collect, analyze, interpret and document information to support the audit results. The audit team, comprised of professionals and technical experts, first determines whether forest practices are in compliance with Code or Agreement requirements. For those practices considered to not be in compliance, the audit team then evaluates the degree to which the practices are judged not in compliance. The significance of the non-compliance is determined based on a number of criteria including the magnitude of the event, the frequency of its occurrence, and the severity of the consequences.

As part of the assessment process, auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet Code or Agreement requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that a non-compliance event, or the accumulation and consequences of a number of non-compliance events, is not significant and is not considered worthy of reporting.

Significant non-compliance – where the auditor determines that the event or condition, or the accumulation and consequences of a number of non-compliance events or conditions, is significant and is considered worthy of reporting.

Significant breach – where the auditor finds that significant harm has occurred or is beginning to occur to persons or the environment as a result of the non-compliance. A significant breach can also result from the cumulative effect of a number of non-compliance events or conditions.

Identification of a possible significant breach requires the auditor to conduct tests to confirm whether or not there has been a breach. If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Ministers of Forests, Energy and Mines, and Water, Land and Air Protection.

Reporting

Based on the above evaluation, the auditor then prepares the "Report from the Auditor" for submission to the Board. The party being audited is given a draft of the report before it is submitted to the Board so that the party is fully aware of the findings. The party is also kept fully informed of the audit findings throughout the process, and is given opportunities to provide additional relevant information and to ensure the auditor has complete and correct information.

Once the auditor submits the report, the Board reviews it and determines whether any party or person is potentially adversely affected by the audit findings. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report to the public and government. The representations allow potentially adversely affected parties to present their views to the Board.

At the discretion of the Board, representations may be written or oral. The Board will generally offer written representations to potentially adversely affected parties, unless the circumstances strongly support the need for an oral hearing.

The Board then reviews both the report from the auditor and the representations before preparing its final report, which includes the Board's conclusions and may also include recommendations, if appropriate.

If the Board's conclusions or recommendations result in newly adversely affected parties or persons, additional representations would be required.

Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

Report from the Auditor

C. Report from the Auditor

1.0 Introduction

In 2002, as required by chapter 5, section 55 of the *Nisga'a Final Agreement* (the Agreement), the Forest Practices Board carried out the second of five annual audits of compliance with provincial forest practices legislation and the forestry-related requirements of the Agreement.

The Agreement requires the Forest Practices Board to perform compliance audits of forest agreements and licences on Nisga'a lands in each year of a defined five-year transition period that ends on May 10, 2005. During this period, annual compliance audits must assess:

- Compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code)
- Compliance with the forestry-related provisions of the *Nisga'a Final Agreement*. These provisions include forest cover constraints (e.g., a minimum age of 120 years must be maintained for at least 80 percent of the pine mushroom polygon); visual objectives for specific sites; requirements for local approval of harvesting in specific locations (e.g., harvesting within one kilometre of Gingietl Creek Ecological Reserve requires the agreement of the Gitwinksihlkw Village Government); and specific no harvest zones (e.g., 100 metres either side of the centre line of the Grease Trail).

Description of the Nisga'a lands

The Nisga'a lands are located in and around the Nass Valley, which is approximately 100 kilometres northwest of the city of Terrace.

Overview of Nisga'a Lands

Operations on Nisga'a lands

Four operators currently have activities or obligations on Nisga'a lands:

- Skeena Cellulose Inc. (Skeena), which is the operating subsidiary of NWBC Ltd.
- Sim Gan Forest Corporation (Sim Gan)
- West Fraser Mills Ltd. (West Fraser)
- the Kalum Forest District Small Business Forest Enterprise Program (SBFEP)

Skeena is the only company currently logging on Nisga'a lands. Skeena's allowable annual cut (AAC) ranges between 113,000 and 140,000 cubic metres for each year of the five-year transition period.

In addition, the district manager of the Kalum Forest District has obligations on Nisga'a lands.

The current breakdown of activities and obligations on Nisga'a lands is described in Table 1.

Table 1: Activities and Obligations on Nisga'a Land

Licensee	Reforestation and road/bridge maintenance and deactivation obligations	Planning, road construction and harvesting
Skeena Forest Licence (FL) A64298	Yes	Yes
Skeena Tree Farm Licence (TFL) #1	Yes	No
West Fraser Mills Ltd. (West Fraser) FL A16882	Yes	No
Sim Gan Forest Corporation (Sim Gan) FL A64299	Yes	No
Kalum District Small Business Forest Enterprise Program (SBFEP)	Yes	No

2.0 Audit Scope

All forestry activities, planning and obligations subject to the Code for the period July 17, 2001, to August 16, 2002, were included in the scope of the audit. These included ongoing forest practices as well as continuing reforestation and road maintenance obligations.

The activities and obligations subject to audit are described in Table 2.

Table 2: Activities and Obligations Subject to Audit

Activity/ Obligation	Skeena	Sim Gan	West Fraser	SBFEP
Operational Planning	3 silviculture prescriptions[i] approved during audit period. The 2000-2005 forest development plan[ii], extended to Sept. 11/02.	No new operational plans approved during audit period.	No new operational plans approved during audit period.	No new operational plans approved during audit period.
Harvesting	10 cutblocks	None	None	None
Road Construction	12.9 kilometres	None	None	None
Road Maintenance	290.9 kilometres	39.3 kilometres	21.9 kilometres	17.2 kilometres
Permanent Road Deactivation	5.1 kilometres	3.2 kilometres	None	None
Bridge Maintenance	33 bridges	9 bridges	2 bridges	None
Silviculture Activities	5 cutblocks	9 cutblocks	20 cutblocks	10 cutblocks

Activity/ Obligation	Skeena	Sim Gan	West Fraser	SBFEP
Silviculture Obligations	9 cutblocks	2 cutblocks	4 cutblocks	1 cutblock

The district manager of the Kalum Forest District has obligations for forest management on Nisga'a lands. Specific obligations, which were subject to audit, are as follows:

- maintenance of forest service roads (FSRs) not maintained by other parties under road use agreements (there are currently 1.8 kilometres of these FSRs), including maintenance of 2 bridges
- actions to address outstanding reforestation obligations of the Ministry of Forests for areas logged prior to October 1, 1987 (there are currently five cutblocks considered to have "backlog areas")
- actions to address forest health issues
- management activities on free-growing stands (no such activities occurred during the period)

Scope Restriction

The audit of fire protection was limited to an assessment of Skeena's fire-preparedness plan and fire-preparedness measures at active work sites. Only Skeena had active operations that required a fire-preparedness plan and measures to be in place. Sim Gan, West Fraser, and the SBFEP have not conducted activities on Nisga'a lands that require fire-preparedness plans, and had no active operations at the time of the audit.

3.0 Audit Findings

Planning and practices examined

The audit work on selected roads and cutblocks included ground-based procedures and assessments from the air using a helicopter.

The activities examined in the audit are described in Table 3.

Table 3 : Activities Examined

Activity/ Obligation	Skeena	Sim Gan	West Fraser	SBFEP
Operational Planning	3 silviculture prescriptions	N/A	N/A	N/A
Harvesting	5 cutblocks	N/A	N/A	N/A
Road Construction	12.9 kilometres	N/A	N/A	N/A

Activity/ Obligation	Skeena	Sim Gan	West Fraser	SBFEP
Road Maintenance	104.8 kilometres	39.3 kilometres	18.9 kilometres	17.2 kilometres
Permanent Road Deactivation	3.8 kilometres	3.2 kilometres	N/A	N/A
Bridge Maintenance	1 bridge	9 bridges	1 bridge	N/A
Silviculture Activities	3 cutblocks	4 cutblocks	3 cutblocks	2 cutblocks
Silviculture Obligations**	5 cutblocks	2 cutblocks	2 cutblocks	1 cutblock
Fire-Preparedness Measures	Fire-preparedness plan and 2 active cutblocks	N/A	N/A	N/A

**In addition to existing silviculture obligations (regeneration delay and free growing), there is a general requirement to maintain stands that have met regeneration delay but are not yet free growing (section 70. 4(d) of the *Forest Practices Code of British Columbia Act*). This requirement expires once the stands are free growing. Currently, approximately 150 cutblocks fall into this population. Audit overview flights and field examination of 29 cutblocks during 2000 and 2001 did not identify any potentially significant issues with this population, except as described in section 4.2 of this report

The audit also examined the following district manager obligations:

- road maintenance of 1.8 kilometres of forest service road (all other FSRs are maintained by other parties under road use agreements), and 2 bridges
- actions to address backlog areas on 5 cutblocks
- actions to address forest health issues

Findings

The audit found that Skeena's forest planning and practices were in compliance, in all significant respects, with applicable Code requirements for operational planning; timber harvesting; silviculture; fire-preparedness planning; and road construction, maintenance and deactivation.

Sim Gan, West Fraser and the SBFEP were found to be in compliance, in all significant respects, with applicable Code requirements for silviculture and road maintenance and deactivation.

Additionally, the audit found that the activities of the Ministry of Forests, Kalum Forest District were in compliance, in all significant respects, with applicable Code requirements for silviculture, road maintenance and forest health obligations.

4.0 Other Comments

Changes since 2001

As this was the second annual audit of planning and practices on Nisga'a lands, the audit team was able to observe changes in practices and planning since the 2001 audit, including how significant and non-significant non-compliances, that were observed during the 2001 audit, were addressed. The following sections summarize the key changes since 2001.

a) Skeena - riparian planning and practices

The 2001 audit of Skeena's operations on Nisga'a lands identified significant non-compliance with the riparian management requirements of the Code.

The 2002 audit noted that Skeena has carried out significant work to address the issues identified in the 2001 audit. All of the Skeena cutblocks visited in 2002 had their silviculture prescriptions amended since 2001 to eliminate any inaccuracies or unachievable prescriptions. The amendments and practices were found to be appropriate. The auditors closely examined riparian classification and riparian practices, and identified strong performance in this area. It was notable that the S4 streams inspected had significant levels of trees retained within the streamside buffers.

b) Sim Gan - road and bridge maintenance obligations

The 2001 audit of Sim Gan's operations on Nisga'a lands identified significant non-compliance in road maintenance and bridge inspection activities.
The 2002 audit noted that Sim Gan has completed work on those specific issues identified in the 2001 audit. Sim Gan prepared a road and bridge maintenance ledger, conducted site-specific assessments of drainage structures and undertook road maintenance activities.

Kalum District - forest health actions

The audit noted that the incidence of Dothistroma needle blight (Mycosphaerella pini) is increasing significantly in lodgepole pine plantations on Nisga'a lands, particularly in the lower elevations of the interior cedar hemlock biogeoclimatic zone.

Dothistroma needle blight is a potentially devastating foliar disease that infects and kills needles of a wide range of pine species. Damage seems to be the most severe on trees growing in sub-optimal sites (e.g., depressions and moist sites). Trees under 10 years of age are the most susceptible.

Where environmental conditions favour infection (cool, moist summers), this blight can spread rapidly and cause significant damage. Trees can be defoliated within weeks and mortality is common with repeated attacks, especially in young stands.

The blight has the potential to affect plantations that are either recently declared free-growing or due to be declared free-growing. Because the declaration of free-growing status is the act that transfers the plantations to Nisga'a responsibility, there is considerable sensitivity to the potential impact of the blight. Of particular concern would be plantations that are declared free-growing under current free-growing standards and then quickly revert to non free-growing status as a result of pre-existing blight problems.

At the present time, the Kalum District is waiting for Forest Practices Branch approval of proposed new guidelines for free-growing standards in blight-affected stands. In the interim, existing guidelines are being followed to determine the levels of blight-related damage that can be accepted in a free-growing survey. Where significant damage has been caused to young stands, new surveys are assessing the need for fill planting with alternative tree species in order to meet minimum free-growing standards. Future annual compliance audits will examine responses to the blight by the Kalum District and the affected licencees.

5.0 Audit Opinion

In my opinion, the operational planning; timber harvesting; silviculture; fire-preparedness planning; and road construction, maintenance and deactivation activities carried out on Nisga'a lands by Skeena Cellulose Inc., West Fraser Mills Ltd., Sim Gan Forest Corporation, and the Kalum SBFEP complied in all significant respects with the requirements of the Code and the Agreement as of August 2002.

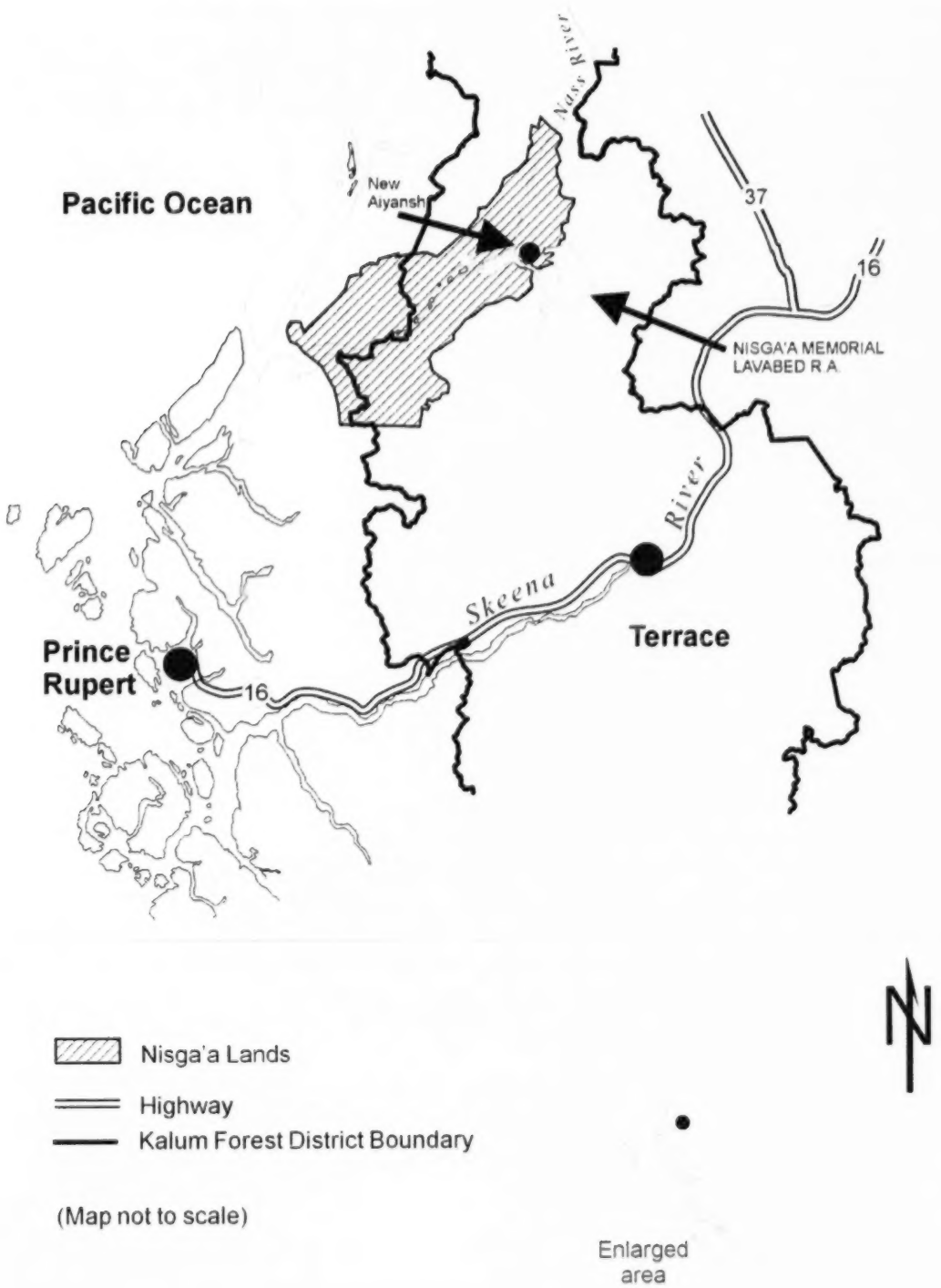
Additionally, road maintenance, silviculture and forest health obligations on Nisga'a lands that are the responsibility of the Ministry of Forests, Kalum Forest District, complied in all significant respects with the requirements of the Code as of August 2002.

In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.
Sections 2.0 and 3.0 of this report from the auditor describe the basis of the audit work performed in reaching the above opinion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Code and the Agreement.

Chris Ridley-Thomas, R.P.Bio
Auditor of Record
Vancouver, British Columbia

December 17, 2002

Audit of Nisga'a Lands



[i] A silviculture prescription is a site-specific operational plan that describes the forest management objectives for an area to be harvested (a cutblock). The silviculture prescriptions examined in the audit are required to describe the management activities proposed to maintain the inherent productivity of the site, accommodate all resource values including biological diversity, and produce a free-growing stand capable of meeting stated management objectives. Silviculture prescriptions must be consistent with forest development plans that encompass the area to which the prescription applies.

[ii] A forest development plan is an operational plan that provides the public and government agencies with information about the location and scheduling of proposed roads and cutblocks for harvesting timber over a period of at least five years. The plan must specify measures that will be carried out to protect forest resources (including water, fisheries, and other forest resources). It must also illustrate and describe how objectives and strategies established in higher level plans, where they have been prepared, will be carried out. Site specific plans are required to be consistent with the forest development plan.

PO Box 9905, Stn Prov Govt
Victoria, British Columbia
Canada V8W 9R1

Phone: 250-387-7964
Fax: 250-387-7009
Toll free: 1-800-994-5899
E-mail: fpboard@gems9.gov.bc.ca

Information on the Board is on the
internet: http://www.fpb.gov.bc.ca